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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/782,755 | 02/23/2004 | Masaharu Edo | D-1578 | 6182 |

7590

09/20/2005

HAUPTMAN KANESAKA BERNER PATENT AGENTS, LLP
1700 Diagonal Road, Suite 310
Alexandria, VA 22314

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| EXAMINER |
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SCHILLINGER, LAURA M

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| ART UNIT | PAPER NUMBER |
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2813

DATE MAILED: 09/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/782,755

Applicant(s)

EDO ET AL.

Examiner

Laura M. Schillinger

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 August 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2/23/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Priority

Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, rejected under 35 U.S.C. 102(e) as being anticipated by Edo ('584)*

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

1. A micro power converter with multiple outputs, comprising:

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a semiconductor substrate having a semiconductor integrated circuit, a plurality of thin film magnetic induction components electrically connected to the semiconductor integrated circuit and having a plurality the magnetic insulation substrates (Fig. 7a), said plurality of thin film magnetic induction components (4/5) being spaced apart from each other with a gap therebetween (Fig. 7b), and a capacitor electrically connected to the semiconductor integrated circuit (Abs., lines: 1-20).

2. A micro power converter according to claim 1, further comprising a magnetic isolation layer disposed in the gap between the magnetic insulation substrates for magnetically isolating the thin film magnetic induction components (Fig. 7b (16)).

3. A micro power converter according to claim 1, wherein each of said thin film magnetic induction components includes one of said magnetic insulation substrates, a coil conductor formed on the one magnetic insulation substrate, and a plurality connection terminals formed at a peripheral portion of said one magnetic insulation substrate, said plurality of the thin film magnetic induction components being arranged with the gap and attached at the plurality of the connection terminals (Fig. 7a-7b).

4. A micro power converter according to claim 1, wherein said plurality of the magnetic insulation substrates is formed of a ferrite substrate (Col. 4, lines: 10-15).

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5. A micro power converter according to claim wherein said magnetic isolation layer is formed of a non-magnetic material (Col.7, lines: 25-35).

6. A micro power converter according claim non-magnetic material is a resin material (Col.8, lines: 1-10).

7. A micro power converter according claim non-magnetic material is a ceramic material (Col.8, lines: 1-10).

8. A micro power converter according to claim 3, wherein said plurality of the connection terminals is formed on each of plurality of the magnetic insulation substrates same planar positions, said plurality of the connection terminals connected to two ends of each coil inductor and located on one magnetic insulation substrate being located at planar positions different from those of another magnetic insulation substrate (Fig.7a and 7b).

9. A micro power converter according to claim 8, wherein one said plurality of the connection terminals formed on one magnetic insulation substrate faces another magnetic insulation substrate, and has a height greater than that coil conductor formed on the one magnetic insulation substrate (Fig.7b).

10. A micro power converter according to claim 3, wherein said plurality of the connection terminals includes a first terminal formed on a front surface of one magnetic insulation substrate

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and a second terminal formed on a rear surface of the one magnetic insulation substrate, said first terminal being electrically connected to the second terminal through a hole formed in the one magnetic insulation substrate (Fig. 7a).

11. A micro power converter according to claim 10, wherein said semiconductor substrate electrically connected to the first terminal (Fig. 7a).

12. A micro power converter according to claim 10, wherein said capacitor is electrically connected to the first terminal (Fig. 7a).

Conclusion

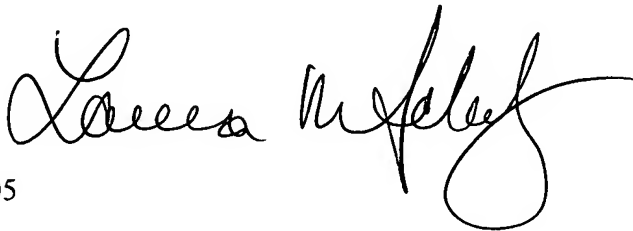
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura M. Schillinger whose telephone number is (571) 272-1697.

The examiner can normally be reached on M-T, R-F 7:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl W. Whitehead, Jr. can be reached on (571) 272-1702. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Laura M Schillinger', with a large, stylized loop at the end.

Laura M Schillinger
Primary Examiner
Art Unit 2813

09/16/05